Science News

Research Notebook

02/26/03

Pregnant women who drink eight or more cups of caffeinated coffee a day run more than twice the risk of stillbirth compared with women who do not drink coffee, according to a study reported in the current issue of the British Medical Journal.

Researchers in Denmark identified 18,478 pregnant women who were about to deliver babies at Aarhus University Hospital during 1989-96. The women completed two questionnaires, which provided information about medical history, coffee consumption, smoking habits and alcohol use.

Compared with women who did not drink any coffee, women who drank four to seven cups a day had an 80 percent increased risk of stillbirth, and women who drank eight or more cups a day had a 300 percent increased risk.

Women with a high intake of coffee were more likely to be smokers and to have a high intake of alcohol. Adjusting for those factors only reduced the risk slightly. Scientists find sign of warm fog surrounding, enveloping Milky Way %%bodybegins%%Evidence shows the universe is about 73 percent "dark energy," 23 percent "dark matter" and only 4 percent normal matter. Which leaves the question: Where is all the normal matter?

Astronomers call this dilemma the "missing mass" problem. They can see normal, baryonic matter -- protons, electrons and neutrons -- when it forms luminous stars, or when it blocks starlight as huge, dark molecular clouds. What they see is only a fraction of the normal matter they know is out there.

Now, astronomer Fabrizio Nicastro of the Harvard-Smithsonian Center for Astrophysics and colleagues have found evidence for a large reservoir of baryons that forms a warm fog surrounding and enveloping the Milky Way, our home galaxy, and its neighbors.

"Our research shows that this warm fog may hold as much as two-thirds of the normal matter within the neighborhood of the Milky Way," Nicastro said.

Astronomers cannot see this warm intergalactic fog directly because it is too diffuse, so they detected the fog using the shadow it casts. Nicastro and his team looked at ultraviolet and X-ray wavelengths where the intergalactic fog absorbed light from distant sources such as quasars and active galactic nuclei.

They culled data from the Far Ultraviolet Spectroscopic Explorer satellite to identify about 50 clouds, or fog banks, surrounding our galaxy in every direction.

The researchers reported their study in the Feb. 12 issue of the journal Nature.

-- Compiled by Richard L. Hill

» Send This Page | » Print This Page

MORE SCIENCE NEWS

» Higher education
» BRIEFLY
» Carbon nanotubes may be magical molecular wands

More Stories | 6-Month Archive | Complete News index

MORE FROM THE OREGONIAN

Latest News | The Oregonian Links & Archives

About Us | Help/Feedback | Advertise With Us